

AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims, in which claims 10-12 have been canceled without prejudice or disclaimer, claims 5, 7-9, 13, 14, 17, and 20-25 have been amended, and new claims 26-28 have been added.

1. - 4. (Canceled)

5. (Currently Amended) An apparatus comprising:

at least one processor; and

at least one memory including computer program code for one or more programs, the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform at least the following,

generate a message when the apparatus determines that the apparatus arrives a localized service area is roaming in cells of a cellular radio network, the message indicating that the apparatus ~~has detected that it is in [[a]] the localized service area defined independently from cells using a computed geographic location of the mobile station, the geographic location being computed independent from a global positioning system (GPS) receiver, the message being generated by the apparatus without action by a user of the apparatus; and~~

~~determine to transmit cause, at least in part, transmission of the message to a base station a communications system covering the localized service area; and receive information of to receive one or more services localized based upon the localized service area and offered to said mobile station by a communications system including the base station, in response to the message.~~

6. (Previously Presented) An apparatus of claim 5, wherein the apparatus is a mobile phone, and said at least one memory includes a removable memory.

7. (Currently Amended) A method comprising:

generating at a mobile station a message when the mobile station determines that the apparatus arrives a localized service area is roaming in cells of a cellular radio network, the message indicating that the mobile station has detected that it is in [[a]] the localized service area defined independently from cells using a computed geographic location of the mobile station, the geographic location being computed independent from a global positioning system (GPS) receiver, the message being generated by the mobile station without action by a user of the mobile station; and

determining to transmit causing, at least in part, transmission of the message to a base station a communications system covering the localized service area; and receiving information of to receive one or more services localized based upon the localized service area and offered to said mobile station by a communications system including the base station, in response to the message.

8. (Currently Amended) A method of claim 7, wherein further comprising:

in response to the message detection of the arrival of the mobile station in the localized service area, a predetermined additional receiving one or more service[[s]] [[are]] changes offered to at the mobile station.

9. (Currently Amended) A method of claim 8, wherein said additional one or more service[[s]] changes involve sending of announcements to the mobile station.

10. - 12. (Canceled)

13. (Currently Amended) A method of claim 7, wherein the mobile station ~~detects~~ determines that it is the mobile station arrives in the localized service area by: comparing a computed current geographic location of the mobile station with a stored geographic definition of the localized service area stored at the mobile station, and determining the mobile station is located in the localized service area when the computed current geographic location of the apparatus is within the stored geographic definition of the localized service area.

14. (Currently Amended) A method of claim 13, further comparing:
receiving control information from a plurality of base stations at the mobile station, the control information including geographic coordinates of each respective one of the base stations; and
averaging the geographic coordinates of the base stations to obtain geographic coordinates of the computed current geographic location of the mobile station.

15. (Canceled)

16. (Previously Presented) A method of claim 7, wherein the message is either a short message service message, an unstructured supplementary service data message, or a dual tone multi-frequency-coded message.

17. (Currently Amended) A method of claim 7, wherein the message is sent to the communications system base station in conjunction with a telephone call or a data call.

18. (Previously Presented) A method of claim 7, wherein the one or more services include transmitting announcements specific for the localized service area.

19. (Previously Presented) A method of claim 7, wherein the localized service area is an airport or a cafeteria.

20. (Currently Amended) An apparatus of claim 5, wherein the apparatus ~~detects~~ determines that ~~it is~~ the apparatus arrives in the localized service area by: comparing a ~~computed~~ current geographic location of the apparatus with a ~~stored~~ geographic definition of the localized service area ~~stored at the apparatus~~, and determining the apparatus is located in the localized service area when the ~~computed~~ current geographic location of the apparatus is within the ~~stored~~ geographic definition of the localized service area.

21. (Currently Amended) An apparatus of claim 20, wherein the apparatus is further caused to:

receive control information from a plurality of base stations, the control information including geographic coordinates of each respective one of the base stations; and average the geographic coordinates of the base stations to obtain ~~geographic coordinates of~~ the ~~computed~~ current geographic location of the apparatus.

22. (Currently Amended) A computer-readable storage medium carrying one or more sequences of one or more instructions which, when executed by one or more processors, cause an apparatus to at least perform the following steps:

generating a message when the apparatus determines that the apparatus arrives a localized service area is roaming in cells of a cellular radio network, the message indicating that the apparatus has detected that it is in [[a]] the localized service area defined independently from cells using a computed geographic location of the mobile station, the geographic location being computed independent from a global positioning system (GPS) receiver, the message being generated by the apparatus without action by a user of the apparatus; and

determining to transmit cause, at least in part, transmission of the message to a base station a communications system covering the localized service area; and receiving information of to receive one or more services localized based upon the localized service area and offered to said mobile station by a communications system including the base station, in response to the message.

23. (Currently Amended) A computer-readable storage medium of claim 22, wherein the apparatus determines that it-is the apparatus arrives in the localized service area by: comparing a computed current geographic location of the apparatus with a stored geographic definition of the localized service area stored at the apparatus, and determining the apparatus is located in the localized service area when the computed current geographic location of the apparatus is within the stored geographic definition of the localized service area.

24. (Currently Amended) A computer-readable storage medium of claim 22, wherein the apparatus is caused to further perform:

receiving control information from a plurality of base stations, the control information including geographic coordinates of each respective one of the base stations; and

averaging the geographic coordinates of the base stations to obtain geographic coordinates of the ~~computed~~ current geographic location of the apparatus.

25. (Currently Amended) A method of claim 7, wherein ~~the localized service area is defined independently from cells, and the~~ ~~computed~~ current geographic location of the mobile station includes ~~computed~~ geographic coordinates.

26. (New) A method of claim 7, further comprising:
causing, at least in part, transmission of a notification indicating that the mobile station determines that the mobile station departs the localized service area to change reception of the one or more services.

27. (New) A method of claim 7, wherein the localized service area is defined in a chronological term, a temporal dimension, or a combination thereof.

28. (New) A method of claim 7, wherein the one or more services include call pricing, call prioritization, a modulation method limitation, a communication data rate, communication connection quality, routing of incoming data to the mobile station or another mobile station, activation or inactivation of automatic call transfer, activation or inactivation of a voice mail service, or a combination thereof.